

Docket: 28575/US/US

# UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor:

Rajinder Singh

Appln. No.:

10/631,029

Filing Date:

Title:

July 29, 2003

**Methods for Treating or Preventing Diseases** 

with 2,4-Pyrimidinediamine Compounds

Examiner:

Unknown

Group Art Unit:

1632

# PETITION UNDER 37 CFR 1.182

Mail Stop MISSING PARTS

Commissioner for Patents P. O. Box 1450

Alexandria, VA 22313-1450

Express Mail mailing label number: EV 533898369 US

Date of Deposit: September 21, 2004

I hereby certify that this document or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kim Anderson

Dear Sir:

Pursuant to 37 C.F.R. 1.182 Applicant hereby requests that the above identified nonprovisional patent application be corrected by addition of pages 767-770. Enclosed is a copy of the return receipt postcard received August 19, 2003 from the United States Patent and Trademark Office indicating 785 pages of the specification, claims and abstract were received by the United States Patent and Trademark Office.

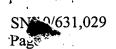
Also, it is my practice to review the entire application and county every page before it is mailed to the United States Patent and Trademark Office, on July 29, 2003 I personally counted every page of the application to confirm that all material was included in the application. I have included a copy of pages 767-770 as previously supplied to you as noted above.

Applicant respectfully requests that pages 767-770 be added to your system to make to our application complete for the filing of Application Serial No. 10/631,029 filed July 29, 2003.

09/23/2004 HALI11 00000019 10631029

01 FC:1460

130.00 OP



Enclosed is a check in the amount of \$130.00 for the petition fee (37 CFR 1.17(h)). The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment to Deposit Account 04-1420

Date: In hal 21 2005

Respectfully submitted,
DORSEY & WHITNEY LLP

Customer Number 257,63

By: Och h Scott D. Rothenberger

Reg. No. 41,277 Intellectual Property Department

**Suite 1500** 

50 South Sixth Street

Minneapolis, MN 55402-1498

(612) 340-8819



UNITED STATES DEPARTMENT OF COMMERCE UNITED STATES DEPARIMENT OF COMMI United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.C. Box 1450 Alexandria, Vinginia 22313-1450 www.uspto.gov

APPLICATION NUMBER

FILING OR 371 (c) DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/631.029

07/29/2003

Rajinder Singh

28575/US/US

**CONFIRMATION NO. 3056** 

**FORMALITIES LETTER** 

\*OC000000013694019\*

Scott D. Rothenberger DORSEY & WHITNEY LLP Intellectual Property Department 50 South Sixth Street, Suite 1500 Minneapolis, MN 55402-1498

Date Mailed: 09/01/2004

# NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

#### Filing Date Granted

#### **Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- · The statutory basic filing fee is missing. Applicant must submit \$ 385 to complete the basic filing fee for a small entity.
- · The oath or declaration is missing. A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

The following item(s) appear to have been **omitted** from the application:

- Page(s) 767-770 of the specification (description and claims).
- I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (37 CFR 1.17(h))) with evidence of such deposit must be filed within TWO MONTHS of the date of this Notice. The petition fee will be refunded if is determined that the item(s) was received by the USPTO.
- II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h)) requesting the later filing date must be filed within TWO MONTHS of the date of this Notice.

Applicant is advised that generally the filing fee required for an application is the filing fee in effect on the filing date accorded the application and that payment of the requisite basic filing fee on a date later than the filing date of the application requires payment of a surcharge (37 CFR 1.16(e)). To avoid processing delays and payment of a surcharge, applicant should submit any balance due for the requisite filing fee based on the later filing date being requested when submitting the omitted items(s) and the petition (and petition fee) requesting the later filing date.

III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. **THIS TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) or (b)**. In the absence of a timely filed petition in reply to this Notice, the application will maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (*i.e.*, the original disclosure of the invention) will include only those application papers present in the USPTO on the date of deposit.

In the event that applicant elects not to take action pursuant to options (I) or (II) above (thereby constructively electing option (III)), amendment of the specification to renumber the pages consecutively and cancel incomplete sentences caused by any omitted page(s), and/or amendment of the specification to cancel all references to any omitted drawing(s), relabel the drawing figures to be numbered consecutively (if necessary), and correct the references in the specification to the drawing figures to correspond with any relabeled drawing figures, is required. A copy of the drawing figures showing the proposed changes in red ink should accompany with any drawing changes. Such amendment and/or correction to the drawing figures, if necessary, should be by way of preliminary amendment submitted prior to the first Office action to avoid delays in the prosecution of the application.

The applicant needs to satisfy supplemental fees problems indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

• Additional claim fees of \$415 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

#### **SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is \$865 for a Small Entity

- \$385 Statutory basic filing fee.
- \$65 Late oath or declaration Surcharge.
- Total additional claim fee(s) for this application is \$415
  - \$270 for 30 total claims over 20.
  - \$145 for multiple dependent claim surcharge.

Replies should be mailed to: Mail Stop Missing Parts

Commissioner for Patents

P.O. Box 1450

Alexandria VA 22313-1450

A copy of this notice <u>MUST</u> be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202
PART 2 - COPY TO BE RETURNED WITH RESPONSE



Docket: 28575/US/US

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mrst Named

Inventor:

Rajinder Singh

Application No.:

10/631,029

Filing Date:

July 29, 2003

**Methods for Treating or Preventing** 

Title:

Autoimmune Diseases with 2,4-

**Pyrimidinediamine Compunds** 

Examiner:

Unknown

Group Art Unit:

1632

## TRANSMITTAL LETTER

Mail Stop MISSING PARTS

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

Express Mail mailing label number: EV 533898369 US

Date of Deposit: September 21, 2004

I hereby certify that this document or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Kim Anderson
Name

Dear Sir:

The following documents are enclosed in connection with the above-referenced patent application:

- 1. Petition (2 pgs.);
- 2. Exhibit A Copy of Return Receipt Postcard received August 19, 2003;
- 3. Exhibit B Copy of pages 767-770 of the specification (4 pgs.);
- 4. Part 2 Copy to Be Returned with Response (3 pgs.);
- 5. Fee Transmittal (1 pg.);
- 6. Check in the amount of \$130 to cover Petition fee; and
- 7. Return Receipt Postcard.

Respectfully submitted,

DORSEY & WHITNEY LLP

Customer Number 25763

Date: September 21, 2004

By:

Scott D. Rothenberger

Reg. No. 41,277

Intellectual Property Department

**Suite 1500** 

50 South Sixth Street

Minneapolis, MN 55402-1498

(612) 340-8819

# APPLICATION FEE TRANSMITTAL SHEET (FY 2004)

	Complete if Known
Application No.	10/631,029
Filing Date	July 29, 2003
First Named Inventor	Rajinder Singh
Group Art Unit	1632
Examiner Name	Unknown
Atty. Docket Number	28575/US/Us

						Ally. Doc	ket Number		26575/05/05	
War.	ME	THOD OI	F PAYME	NT (Check O	ne)				FEE CALCULATION (Continued)	
1. A The credit any of Deposit Acc	Director in over paymonicount No.:	s hereby a ents to: <u>04-1420</u>	authorized !	I to charge ind	dicated fees	s and	Large Entity Fee	Small Entity Fee	3. ADDITIONAL FEES Fee Description	Fee paid
	icant claim	s small ei		d under 37 C. s (see 37 C.F.		ind 1.17	50	25	Surcharge - late provisional filing fee or cover sheet Surcharge – Late nonprovisional filing	
		FFF	CALCUL	ATION		**	130	65	fee or oath	
			BASIC FIL				180	180	Submission of IDS	
Large Entity	Sma Entit	dl	e Descripti				40	40	Recording each patent assignment per property (times number of properties)	
Fee	Fee						110	55	Extension for reply within first month	
160	80		Provision	al Filing Fee			420	210	Extension for reply within second month	
770	385		Utility Fili	no Fee			950	475	Extension for reply within third month	
710	000	, L	Ounty i iii	11g 1 CC			1,480	740	Extension for reply within fourth month	
340	170		Design F	iling Fee			2,010	1,005	Extension for reply within fifth month	
770	385		Reissue I	Filing Fee			770	385	Submission After Final 1.129	
770	300	′ ⊔	(Cloode I	i iiiig i ee			330	165	Notice of Appeal	
				Subtotal (1)	N/A		330	165	Filing a brief in support of an appeal	
							290	145	Request for oral hearing	
		2. EX	XTRA* CL	AIM FEES			110	55	Terminal Disclaimer Fee	
	imber aims	Prior	Extra	Fee from Below*	Fee Paid		130	130	Petitions to the Commissioner	\$130
Total		20 =		<del></del>	<del></del>		50	50	Petitions related to provisional applications	
Multiple De	ependent	=					1,330	665	Utility/Reissue Issue Fee (including advance copies)	
				Subtotal (2)	N/A		480	240	Design Issue Fee (inc. advance copies)	
		*Calculati	ion of Extr	a Claim Fees			770 300	385 300	Request for Continued Examination (RCE) Publication fee for early, voluntary, or	
Large	Small								normal publication	
Entity Fee	Entity Fee	Fee Des	scription				300	300	Publication fee for re-publication	
18	9	Claims i	n excess o	of 20			110	55 665	Petition to Revive – unavoidable	
86	43			s in excess o	f 3		1,330	665	Petition to Revive – unintentional	
290	145	•	dependen				OTHER	FEE (sp	ecify)	
86	43	•	•	ent claims ov	er original r	patent			Subtotal (3)	\$130
18	9	Reissue		excess of	J F				Subtotal (3)  Total Amount of Payment:	\$130

CUSTOMER NUMBER 25763	DORSEY & WHITNEY LLP	Intellectual Property Departmen Suite 1500, 50 South Sixth Stre Minneapolis. MN 55402	
Name: Scott D. Rothenberger		Phone No.: (612) 340-8819	Fax No.: (612) 340-8856
Signature: Signature:	Clothe	Reg. No.: 41,277	Date: September 21, 2004



The mail stamp of the United States Patent and Trademark Office on this return receipt postcard acknowledges the filing on the date stamped of the following:

Utility Patent Application Transmittal

Application Data Sheet (3 pgs.)

Specification, Claims, and Abstract (785 pgs.)

Drawings (19 sheets)

Return Receipt Postcard

(Small Entity)
16018 U.S. PTO
10/631029



Via Express Mail, Label No.: EV324256247US (with certificate of mailing)

First Named Inventor: Rajinder Singh Client Name: Rigel Pharamaceuticals

Filing Date: Herewith

Application Title: Methods of Treating or Preventing Autoimmune Diseases....

Attorney/LA Initials: SDR:kks Mailed: July 29, 2003

Docket No.: 28575/US/US

# EXHIBIT B

ST TOM BEEN THE STATE OF THE ST

1 Jurkat 1 1° T-Cell CD69 1C50 TNF 1C50 11.2 (in μM)									Table 11	_						
CD69 IC50 TNF IC50 IL2  (in μM) (in μM) (in μM)  9999  8.925  5.185  9999  9999  10.547  2.35  10.547  2.35  9999  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  10.547  2.35  3.148  1.911  1.911		Jurkat	-	" T-Cell								1° B-Cell	≥	Monocytes/Macrophage	crophage	Τ
9999 8.925 5.185 9999 9999 9999 10.547 2.35 9999 17.375 3.148 1.911 1.988 0.982	Compound		750 T (i)	3	250 III	,2 IC n µM)	250 G	MSCF 10	250 11.4 (in µ	(M)	ICS0 GMSCF ICS0 II.4 ICS0 IFNg CD69 (in μM) (in μM) (in μM) (in μM)	1	350 T	ICSO TNF ICSO (in µM)		ICS0
	R950238	6666										1	$\dagger$			
	R950239	6666	_		<u>!</u>		<u> </u>									
	R950240	8.925	-		-								+-			
	R950241	5.185											+			
	R950244	6666											-			
	R950245	6666	-		-		_		_				-			
	R950246	6666			-								-			
	R950247	6666											-			
	R950251	6666	<u> </u>		-				_				<u> </u>			
	R950253	10.547														
	R950254	2.35											+			
	R950255	6666			<u> </u>											
	R950261	17.375					-		_				<u>                                      </u>			T
		3.148							_				$\vdash$			
	R950263	1.911					-									
	R950264	1.988							_				-			
		0.982											-			i
		3.66					-						-			
	R950267	1.985											-			

							Table 11							
	Jurkat	°-	I" T-Cell							1º B-Cell		Monocyte	Monocytcs/Macrophage	age
Compound	CD69 IC (in μM)	ICSO TNF (in $\mu$	<del>S</del>	IC50 II.2 (in $\mu$ M)	ICS0	ICS0 GMSCF ICS0IL4 (in µM)	350 IL4 (in μM)	1	ICS0 IFNg CD69 ICS0 (in $\mu$ M) (in $\mu$ M)	1	IC50	IC50 TNF (in $\mu M$ )	IC50 IL-6 (in µM)	IC50
R950290	6666	-												
R950291	6666												-	
R950292	6666													
R950293	6666													
R950294	9.793												-	
R950295	4.713						-							
R950296	1.947													
R950344	6666													
R950345	60.9													
R950346	1.948													
R950347	2.704						_							
R950348	0.224													
R950349	0.363						į							
R950356	5.731													
R950368	0.125													
R950371	1.105													
R950372	2.192													
R950373	3.614													
R950374	1.65													
					1						1			

1.

	:					1	Table 11								
	Jurkat		l° T-Cell							1° B-Cell		Monocytes/Macrophage	s/Mac	ophage	Π
Compound	CD69 (in $\mu$ M)	ICSO TNF (in µN	€	0 11.2 (in μΝ	IC50	GMSCF IC (in $\mu$ M)	50 IL4 (in μM)	1050	ICS0  11.2   ICS0  GMSCF   ICS0   IC	CD69 (in $\mu$ M)	1050	I'NF in #M)	IC50	L-6 in #M)	CS0
R950376	18.08														
R950377	5.962		414.44												
R950378	6666														
R950379	0.878														
R950380	8.688														
R950381	0.805														
R950382	1.547														
R950383	1.026														
R950385	2.58														
R950386	11.354														

Although the foregoing invention has been described in some detail to facilitate understanding, it will be apparent that certain changes and modifications may be practiced within the scope of the appended claims. Accordingly, the described embodiments are to be considered as illustrative and not restrictive, and the invention is not to be limited to the details given herein, but may be modified within the scope and equivalents of the appended claims.

:::<u>.</u>.

 $\{x_i\}_{i=1}^n$ 

All literature and patent references cited throughout the application are incorporated by reference into the application for all purposes.